trichophytosis, especially in kerion of children. He regards the eruption as the expression of the trichophytin hypersensitiveness which appears in deep trichophytosis as an immunity phenomenon. By the application of trichophytin or the trichophyton to specifically hypersensitive skins analogous changes may be produced. The pathogensis of the spontaneous exanthem is not yet explained.

Fungus Affections of the Hands and Feet.—Kaufmann-Wolf (*Dermatol. Zeitsch.*, Band xxi, Heft 5), under the above title, reports twenty-five cases of eruptive disease situated on the hands and feet, resembling at times dysidrosis at others eczema, in which various fungi were demonstrable. In 17 of these cases the trichophyton was present; in the remainder various other fungi were found. The author concludes that fungous affections of the hands and feet appear frequently under the picture of dysidrosis or of eczema. The chief symptom is deep-seated, grouped vesicles, which are inclined to suppuration and seldom ooze. The vesicles always lie within the epidermis, and, notwithstanding the absence of recognizable fungous elements in their contents, are infectious, as is shown by culture. The fungus is found in the uppermost layers of the epidermis.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF
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The Diagnosis between Exudates and Transudates.—Maurice Villaret (*Jour. de Physiol. et de Path. gênerale,* May 15, xv, No. 3) publishes two articles dealing with the methods at his disposal for distinguishing exudates from transudates. In the beginning he deals with the various reactions with which we are already familiar. The Rivalta, dating from 1895, consists in the use of distilled water faintly acidulated with acetic acid into which is gently dropped one drop of the fluid to be tested. In the case of a positive reaction, such as is given by an exudate, the drop descends, slowly becoming turbid, and finally bluish-white. As to the explanation of the reaction, Villaret favors the view of Patein, that the reaction is due to a specific albumin, acetoglobulin. It must be admitted that the subject has been widely debated without any fixity of opinion being as yet reached. The reaction of Gangi consists in taking from 3 to 4 c.c. of hydrochloric acid in a test-tube, and laying on top of it, carefully, 4 or 5 c.c. of the fluid to be tested and leaving it for some hours. If the reaction is positive, as occurs with an exudate, the upper fluid becomes turbid, and there is a second ring of marked turbidity half way between the turbid disk lying next to the hydrochloric acid and the top of the fluid. Coagulation in the supernatant fluid is also an indication of positive result. The collargol test is made with a solution of collargol of the strength of 1 in 1000, freshly diluted to a strength of 1 in 25,000. Five test-tubes are filled two-thirds full of this solution, and into the first four are put 2, 5, 10, and 20 drops respectively, of the fluid to be examined. Mixed and carefully set aside away from the dust, they remain for twelve or fourteen hours before being examined. A negative result is shown by perfect limpidity of the solutions, and is to be expected in the presence of an exudate. Villaret considers that a positive reaction with the Rivalta and Gangi test with a negative collargol allows one definitely to conclude that one is dealing with an exudate; and on the other hand, a negative Rivalta and Gangi with a positive collargol test allows one to be certain that one is dealing with a transudate, and that these chemical tests suffice even in the absence of cellular examination, although the latter is highly desirable. In a second paper in which he deals with the examination of the cells in conjunction with the previously mentioned tests, Villaret divides ascitic fluid into three types. Of these the first is ascitic fluid occurring from mechanical causes such as one finds in blocking of the inferior vena cava, and in portal congestion. Endothelial cells are entirely or largely predominant, and the Rivalta and Gangi reactions are negative, and the collargol positive. The second division, ascites from inflammatory causes, may be characterized by lymphocytosis, as in tuberculous peritonitis, or by a mixed cellular picture where the endothelial cells demonstrate that portal hypotension is playing a part, as it might be expected to do in syphilis or cancer of the liver; or yet again by predominance of polynuclears, indicating that the ascites is infected to some degree. With such fluid the Rivalta and Gangi are positive, while the collargol reaction may be either positive or negative. From the two foregoing classes one may be able to distinguish mechanical ascites with secondary infection, in that the cellular picture becomes modified little by little, the polynuclears and lymphocytes progressively replacing endothelial cells. This change is preceded generally by a transformation of the Rivalta and Gangi test which from being negative, become positive: that is, from indicating a transudate, come to suggest an exudate. Finally, in far advanced cases, the transudate origin of the fluid can sometimes be determined by the persistence of the collargol positive reaction, which in the course of time becomes negative, showing that the infection has died out, or has at least been superseded by a mechanical transudate.

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